# *Naval Amphibious Base Little Creek*

**Virginia Beach, Virginia**
Superfund Program Site Fact Sheet

**Type of Facility:** Naval Base Federal Facility
**Funding:** Department of Defense
Defense State Memorandum of Agreement
**Lead Agency:** Navy

**Site Description and History**

The Naval Amphibious Base Little Creek (NABLC) is a 2,147-acre facility within the city limits of Virginia Beach, Virginia. The Chesapeake Bay lies to the north of the facility, Shore Drive to the south, Lake Bradford and Chub Lake to the east, and the city limits of Virginia Beach to the west. Land use at the base is primarily industrial, while land development surrounding the base is residential, commercial, and industrial. The site was listed on the National Priorities List (NPL) in May 1999.
NABLC was commissioned on July 30, 1945, by combining four contiguous activities. Those activities were (1) the Amphibious Training Base encompassing the southwestern corner of the present Little Creek facility; (2) the Construction Battalion Training Center consisting of most of the facility's current acreage; (3) the U. S. Naval Section Base; and (4) the Armed Guard Training Center. The base's mission was the training of landing craft personnel for operational assignments. Over the last 50 years, NABLC has expanded in both area and the complexity of its mission. Currently, NABLC provides logistic facilities and support services to local commands, organizations, other United States and allied units, home ported ships, and commands of the operating forces meeting the amphibious warfare training requirements of the Armed Forces of the United States. Operations that occurred at the NABLC included: vehicle and boat maintenance, boat painting and sandblasting, construction and repair of buildings and piers, mixing and application of pesticides, electroplating of musical instruments, laundry and dry cleaning, medical and dental treatment, and generation of steam for heat. Wastes generated and disposed at NABLC included: pesticides, paints, solvents, inorganics, heavy metals, polychlorinated biphenyls (PCBs), mixed municipal wastes, nickel plating baths, chromic acid, silver cyanide, lacquer stripper, perchlorethylene sludge, soap, dyes, and degreasers.

**Current Site Status**

**Site 5 - Motor Oil Disposal Area:** Site 5 consists of the area between Buildings 9 and 11 and is approximately 100 feet by 150 feet. A small, concrete berm drum storage area, approximately 10 feet by 10 feet, and an oil-water separator were on the northern side of Site 5 along Building 9. Building 11 was originally built as a cable tank building.
The building contained three pits near the center of the floor, covered by steel plates. From 1969 until 1981, motor oil, solvents, and antifreeze from boat engines maintained in Building 11 were reportedly disposed into these pits through holes in the steel plates. Previous reports showed 2,295 gallons of oil were generated annually from activities in Building 11. If similar quantities are projected back to 1969, as much as 43,000 gallons may have been disposed at Site 5. Several rounds of soil and groundwater samples have

been conducted, to date, with results showing only low levels of TPH. These results show reports of disposal may have been grossly overstated. Based on a 1998 Groundwater Monitoring Report, a No Further Remedial Action Plan (NFRAP) Decision Document is anticipated for this site.

**Site 7 - Amphibious Base Landfill:** The Amphibious Base Landfill, operated from 1962 to 1979, is approximately 38 acres at the south central portion of the base. The landfill received all base waste produced between 1968 and 1979 and it contains nearly 500,000 cubic yards of waste. Most of the waste likely consists of nonhazardous solid waste. However, the landfill may have received some hazardous wastes since it was the general receptacle for all wastes generated at the facility. A Remedial Investigation and Feasibility Study (RI/FS) was completed at this site in 1997. In 1998, the Navy issued a final decision document showing the chosen remedy to be institutional control with long term monitoring. In 2004, the Remedial Investigation/Human Health Risk Assessment report was finalized. In 2005, an interim removal action was conducted to address contaminated canal sediment. A record of decision for the site is currently under development.

**Site 8 - Demolition Debris Landfill:** This landfill operated from 1971 until 1979 and it was primarily used for disposal of inert materials. The landfill reportedly covered approximately 2 acres, with waste disposed to a depth of 3 feet. Approximately 4,840 cubic yards of waste are contained in the landfill. Waste included mercury-contaminated carpeting from the demolition of the dental clinic, debris from buildings destroyed by fire, concrete pipe, and debris from the bar screen in the base sewage pump stations. In 2004, a remedial investigation/human health risk assessment and ecological risk assessment were finalized. In 2005, an interim removal action was initiated at the site and completed in 2007. A no further action record of decision should be finalized in 2008.

**Site 9 - Driving Range Landfill:** The Driving Range Landfill, operated from 1952 to 1956, is approximately 6 acres in the northeast portion of the base. A network of sand dunes paralleling the Chesapeake Bay shoreline makes up the northern perimeter of the landfill. During this period, an incinerator was active on the western perimeter of the landfill and, apparently, burned combustible materials generated by NABLC. The resulting ash was disposed in the Driving Range landfill along with any noncombustible item bypassing the incinerator. It is estimated the landfill contains approximately 40,000 cubic yards of waste. The site is currently used as a golf driving range. The depth of cover on the surface of the driving range is unknown. In 1997, the Navy issued a draft final decision document recommending institutional controls and long term monitoring of the groundwater as the preferred remedy for this site. In 2003, a final ROD was concurred upon by VDEQ and signed by the Navy and EPA.

**Site 10 - Sewage Treatment Plant Landfill:** This landfill, operated from 1941 until 1968, is approximately 18 acres in the northeast portion of the base. Site 10 was the only landfill in operation at NABLC until the opening of the Driving Range Landfill in 1952; all waste generated at the base from 1941 to 1952 was deposited at this landfill. The base continued to deposit sewage sludge at the site from 1952 to 1968.
Waste in the landfill was initially deposited directly into the water of Desert Cove and it filled approximately five acres of the cove and continued into marshy lowlands to the north. The average depth of the landfill is 6 feet yielding a waste volume of 46,500 cubic yards. In 1997, the Navy issued a draft final decision document recommending

institutional controls and long term monitoring of the groundwater as the preferred remedy for this site. In 2003, a final ROD was concurred upon by VDEQ and signed by the Navy and EPA.

**Site 11 - School of Music Plating Shop:** The School of Music Plating Shop electroplated musical instruments from 1964 to 1974. The shop was in Building 3651 and consisted of an in-ground concrete tank, used to neutralize plating baths, and its associated piping. The neutralization tank had a diameter of 5 feet and a depth of 11 feet. Approximately 2.5 cubic yards of crushed limestone were placed in the pit to neutralize the acidic plating bath waste. Following neutralization, the wastewater was discharged into the storm sewer. The plating bath commonly contained silver cyanide, copper cyanide, chromic acid, nickel plating baths, acids lacquer, and lacquer stripper. A removal action was conducted in 1995 for the tank and its associated piping and groundwater monitoring is currently being conducted. A supplemental RI was completed in 2006. A record of decision documenting selection of the *insitu* bioremediation alternative was concurred upon by VDEQ and signed by the Navy and EPA in 2007.

**Site 12 - Exchange Laundry Waste Disposal Area:** Dry cleaning operations took place at Site 12 from 1973 until 1978. As much as 1,320 gallons of PCE, soap, sizing, and dye were disposed in a storm sewer or on the ground between 1973 and 1978. A supplemental remedial investigation was completed in 2000 and a feasibility study was prepared in 2004. A record of decision documenting selection of the *insitu* bioremediation alternative was concurred upon by VDEQ and signed by the Navy and EPA in 2005. A remedial action work plan was finalized in 2007 and remediation of the site is underway.

**Site 13 - Public Works PCP tank and Wash Rack:** The PCP tank, with a capacity of 300 to 400 gallons, was used from 1960 through 1974 to treat wood with pentachlorophenol (PCP). Kerosene, tar, paint, and solvents were also present in the dip tank. Near the dip tank there was a wash rack for cleaning vehicles and equipment with steam or solvents and drying racks for treated wood. A removal action for PCB contaminated soil was completed in 1999. A FS was completed in 2004 and a treatability study completed in 2005. A record of decision documenting selection of the *insitu* bioremediation alternative was concurred upon by VDEQ and signed by the Navy and EPA in 2007.

**Site 16 - PCB Capacitor Spill, Pole No.425:** After a lighting strike in the early 1980s, less than 5 gallons of dielectric fluid were found missing from the capacitor, formerly attached to Pole No.425. A removal action, consisting of excavation and disposal of PCB-contaminated soils, was completed in 1995 and the site was formally closed. No further action is planned for this site.

**Community Relations**

Although a federal facility may provide its own community relations program, it must be consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the National Contingency Plan, and the Environmental Protection Agency (EPA) policies. Staff at the Virginia Department of Environmental Quality (VDEQ) reviews and comments on documents such as community relations plans, fact sheets, slide shows, etc. Staff also participates in Restoration Advisory Board (RAB) and public meetings, as requested; visit site locations; and provide additional

community relations support, as needed.

| VDEQ Representative | Information Repository |
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| Paul Herman, P.E.<br>Remediation Project Manager<br>Virginia Department of Environmental Quality<br>P. O. Box 1105<br>Richmond, VA 23240-0009<br>(804) 698-4464, Fax (804) 698-4234<br>E-mail: peherman@deq.virginia.gov | NABLC Library<br>Building 3004<br>8th Street, NAB Little Creek<br>Norfolk, Virginia 23521<br>(757) 464-7691 |